

CLAIMS:

1. A method of embedding a signature in an audio-visual signal for authentication of said audio-visual signal, said audio-visual signal being interlaced or non-interlaced, comprising the steps of
forming a signature based on a first portion of a frame of said audio-visual
5 signal, and
embedding the signature in said first portion and/or at least a second portion of said frame of said audio-visual signal.
2. A method according to claim 1, wherein said portions are patterns of
10 consecutive horizontal lines of said audio-visual signal, said patterns having fewer lines than the entire audio-visual signal.
3. A method according to claim 1, whereby said steps of forming and embedding are repeated until a signature has been embedded for all regions of said frame.
- 15 4. A method according to claim 1 or 2 whereby said first portion of said audio-visual signal is a first field comprising a slice of at least one consecutive line of said lines of said frame of said audio-visual signal and said second portion is a second field comprising a slice of at least one consecutive line of said lines of said frame of said audio-visual signal.
- 20 5. A method according to claim 4 whereby said audio-visual signal is interlaced and said first field comprises all even or odd lines and said second field comprises all respectively remaining even or odd lines.
- 25 6. A method according to claims 1 or 2 whereby said audio-visual signal is non-interlaced and said portions being slices of at least one consecutive line of said lines of said audio-visual signal and said first portion and said slices comprising different consecutive lines of said audio-visual signal.

7. The method according to any preceding claim, the step of embedding the signature being characterised by embedding the signature as a watermark.

8. The method according to claim 7 whereby the watermark is embedded as a spread spectrum watermark.

9. The method according to claim 7, whereby the watermark is embedded in a different portion of said frame than the portion of said frame for which said signature is generated.

10. The method according to claim 1 whereby the step of embedding the signature is further characterised by embedding the signature in a subsequent portion.

11. The method according to claim 1 whereby the steps of forming and embedding said signature are performed in real-time.

12. An apparatus for embedding a signature in an audio-visual signal for authentication of said audio-visual signal according to the method of claim 1, said apparatus comprising

a means forming a signature based on a first portion of a frame of said audio-visual signal, and

a means embedding said signature in said first portion and/or at least a second portion of said frame of said audio-visual signal.

13. An apparatus according to claim 12, wherein said portions are patterns of horizontal lines of said audio-visual signal, said patterns having fewer lines than the entire audio-visual signal.

14. A computer readable medium having a plurality of computer-executable instructions embedding a signature in an audio-visual signal for authentication of said audio-visual signal according to the method of claim 1 comprising

a first program module forming a signature based on a first portion of a frame of said audio-visual signal, and

a second program module embedding said signature in said first portion and/or at least a second portion of said frame of said audio-visual signal.

15. A medium according to claim 14, wherein said portions are patterns of
5 horizontal lines of said audio-visual signal, said patterns having fewer lines than the entire audio-visual signal.

16. Use of the method according to claim 1 in a surveillance camera or security camera or digital image camera or digital video camera or a medical imaging system.